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and comparing the detectable signal generated in the presence and absence of a test compound, to thereby identify said test compound as a modulator of quorum sensing signaling in bacteria.

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- 3. (Amended) The method of claim 1 or 75, wherein said gene that generates a detectable signal comprises a reporter gene that is heterologous to said regulatory sequence.
- 4. **(Amended)** The method of claim 3, wherein said detectable signal is provided by the transcription of said reporter gene or the translation product of said reporter gene.
- 7. (Amended) The method of claim 1 or 75, wherein said cell does not express said quorum sensing signal molecule.
- 9. (Amended) The method of claim 75, wherein said cell is a prokaryote or eukaryote.
 - The method of claim 1 or 75, wherein said quorum sensing controlled gene is endogenous to said cell.
 - 21. (Amended) The method of claim 1 or 75, wherein said quorum sensing signal molecule is an autoinducer of said quorum sensing controlled gene.
 - 24. **(Amended)** The method of claim 1 or 75, wherein the test compound modulates quorum sensing signaling by inhibiting a bacterial enzyme involved in the synthesis of said quorum sensing signal molecule.

25. **(Amended)** The method of claim 1 or 75, wherein the test compound modulates quorum sensing signaling by inhibiting bacterial reception of said quorum sensing signal molecule.

26. (Amended) The method of claim 1 or 75, wherein the test compound modulates quorum sensing signaling by scavenging said quorum sensing signal molecule.

Please add new claim 75 as follows:



75. (New) A method for identifying a modulator of quorum sensing signaling in bacteria, said method comprising:

providing a cell which comprises a quorum sensing controlled gene wherein said quorum sensing controlled gene comprises a nucleotide sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, SEQ ID NO:13, SEQ ID NO:14, SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:17, SEQ ID NO:18, SEQ ID NO:19, SEQ ID NO:20, SEQ ID NO:21, SEQ ID NO:22, SEQ ID NO:23, SEQ ID NO:24, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, SEQ ID NO:29, SEQ ID NO:30, SEQ ID NO:31, SEQ ID NO:32, SEQ ID NO:33, SEQ ID NO:35 and SEQ ID NO:36, operatively linked to a gene that generates a detectable signal in response to a quorum sensing signal molecule;

contacting said cell with a quorum sensing signal molecule in the presence and absence of a test compound;

and comparing the detectable signal generated in the presence and absence of a test compound to thereby identify said test compound as a modulator of quorum sensing signaling in bacteria.

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